

Rejection Under 35 U.S.C. § 112

The Examiner rejected claims 1-20 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1-20 do not remain in the application. Claims 1-3, 5 and 17 are drawn to a composition for enteral administration comprising at least one anti-HIV drug and at least one cortisol blocker. The recipe for making this composition is fully laid out on pages 13-17 of the instant application. The weight ratios of anti-HIV drug to cortisol blocker are given (page 13, lines 12-14), the daily dosages in gms per kg of body weight are given (page 13, lines 14-20), the forms in which the drug can be administered are given (page 14, lines 1 and 2), the effective amount of the compounds is defined (page 14, lines 5-7), the single dosage and total daily dosage amounts are given (page 14, lines 7-9), the pharmaceutically acceptable inert ingredients are given (page 14, lines 10-22) and other materials that may be present in the composition are given (page 15, line 19 through page 16, line 4). In addition, on page 16, lines 3 and 4, the invention is defined as administering the anti-HIV drug and the cortisol blocker “separately to accomplish the objects of the present invention.” Also, the invention is defined as either separate administration of the anti-HIV drug and the cortisol blocker or a composition defined as having both components systemically in the human body (see page 17, lines 1-4).

In regards to the side effects being reduced, gain in body weight, total body fat, and endurance are all measured in Example I. In Example II, CFU-S survival rate is the measure used to indicate the decrease in symptoms. Most all of the side effects, including bone marrow suppression, anemia, elevated triglycerides, elevated cholesterol, insulin intolerance, buffalo

humps, protease paunches can be accomplished through the testing of bodily fluids and visual examination. The statement, in the application, that the “recited side-effects are not present or greatly reduced” means that the 33 groups were tested or checked and the prior side effects were not present or were greatly reduced. The dosages and frequency of administration of the composition are fully disclosed in Table I and would not require undue experimentation to practice the invention disclosed.

In regards to the §112, paragraph 2 rejection of Claim 6 (and Claim 9 which depends from it), the Applicant has fully defined what side effects are being targeted on page 10, lines 10-15. The application reads, “[t]he side effects of anti-HIV drug therapy that can be managed through the method according to the invention include bone marrow suppression, nausea, myalgia, insomnia, Cushings like symptoms, anemia, disruption of fat metabolism, elevated triglycerides, elevated cholesterol, insulin intolerance, buffalo humps and protease paunches.” Once the term has been defined in the specification, it is not necessary to fully list all those side effects again in the claim.

The therapeutically effective amount of a least one cortisol blocker has been defined, as well, on page 14, lines 5-9. The application reads, “[a]s an effective amount of the compounds of the present invention, administered orally, there is contemplated any amount which would serve to decrease the side effects or reactions and the toxicity of the anti-HIV drug. For example, a single dosage of between about 200 mg-2 gm for a typical adult patient is contemplated, with a total dosage of up to 5.0 gms per day is contemplated. A preferred dosage routine is every six hours.”

The Applicant respectfully submits that these rejections can now be properly removed and earnestly requests this decision on the part of the Examiner.

Rejection Under 35 U.S.C. § 103

The Examiner rejected claims 1-3, 5-7, 9-11, 13-15 and 17-20 under 35 U.S.C. 103 as being unpatentable over Devita et al., in combination with Beale and Lemay. Claims 1-3, 5 and 17 are drawn to a composition comprising at least one anti-HIV drugs and at least one cortisol blocker. Claims 6, 7, 9-11, 13-15 and 18-20 are drawn to a method for the management of side effects associated with the administration of anti-HIV drug therapy comprising administration to a patient a therapeutically effective amount of at least one cortisol blocker.

The Examiner has stated that Beale teaches anti-cortisol compounds are shown to reduce the catabolic effects associated with AIDS. What Beale does not teach is the use of anti-cortisol drugs in combination with anti-HIV drugs. Beale is directed toward a method for increasing the lean body mass or muscle mass of a mammal in need of increased lean body mass or muscle mass by the administering pyruvate and a cortisol blocker (see column 5, lines 25-29). Applicant's invention, on the other hand, teaches the administration of at least one anti-cortisol drug *in combination* with conventional anti-HIV drug combinations to prevent, reduce or suppress the Cushingoid type symptoms and fat metabolism side effects of anti-HIV drug therapy. The Applicant's invention has the added benefit of treating the side effects of AIDS without significant damage to the beneficial therapeutic effects of the anti-HIV drugs (see the instant invention, page 12, lines 16-18). Beale does not discuss anti-HIV drug therapy or its side effects, at all. Simply because Beale mentions anti-cortisol and AIDS does not make this raise

this reference to the level of analogous prior art. Beale is not dealing with the discovered problem of protease inhibitor anti-HIV drugs leading to a disruption of fat metabolism as the present invention does.

The Examiner has stated that Lemay et al. teaches the benefits of combination therapies wherein cortisol blockers' are used in the treatment of HIV. This is not a true statement. Lemay does not teach this. In fact, Lemay teaches away from the Applicant's invention. Lemay states that the combination of AZT and DHEA **decreased** the ability of AZT to produce the desired effect. (See last line of the abstract). This article would lead those skilled in the art away from the Applicant's invention as in Lemay et al. a combination of an anti-HIV drug and an anti-cortisol drug **lessened** the effect of the anti-HIV drug. There would no reasonable expectation of success, in the present invention, if Lemay is relied upon.

The Examiner has stated that Devita et al. teaches the benefits of combination therapies wherein cortisol blockers' are used in the treatment of HIV to increase the synergistic effects of an anti-HIV drug and cortisol blockers. This is not a true statement. Devita et al. never mentions cortisol blockers at all. There is little argument that conventional treatment of HIV infected individuals involves the combination of two or more anti-HIV drugs (the cocktail). The Applicant has fully acknowledged this in the present application (see page 4, lines 4-8 and page 8, lines 12-15). The side effects of the anti-HIV cocktails are not recognized or discussed in DeVita et al. The discovered link between protease inhibitors and physical symptoms was not discussed or acknowledged in the Devita et al. reference. Devita et al. lends nothing to the Examiner's obviousness rejection. There is nothing taught in this art that was not discussed and pointed to in the Applicant's application.

The Applicant is fully aware that attacking the references individually does not lead to non-obviousness. But it is necessary to systematically show that the references are non-analogous or teach away from the present invention. The Applicant submits that Devita et al. in combination with Beale and Lemay et al. do not present a *prima facie* case of obviousness. Not one of these references discusses physical symptoms that come about due to the administration of anti-HIV drugs and that can be prevented, suppressed or reduced by the administration of at least one anti-cortisol drug and that can, at the same time, be administered without damage to the beneficial therapeutic effects of the anti-HIV drugs being given. It would be an error to reconstruct the Applicant's claimed invention from the prior art by using the Applicant's invention as a blueprint. The selective combination of references based on hindsight should be avoided. Even though a suggestion to modify the three prior art references to produce the claimed invention need not be expressly stated, there must be some implied suggestion to do so. The Applicant believes that one skilled in the art would not find obvious the invention as a whole based upon the prior art references cited. There is no teaching, suggestion or incentive, in the prior art, to combine the anti-cortisol drug treatment with the anti-HIV drug treatment to decrease the side effects of anti-HIV drugs. And in the Lemay reference there is an express teaching away from the present invention. The Examiners' position that it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made that a cortisol blocker could be used in a composition with an anti-HIV drug is flawed since Lemay et al. teaches away from the present invention and Devita et al. simply teaches the use of two or more anti-HIV drugs. One of skill in the art would not have been provided with a clear motivation and a reasonable expectation of success to combine the teachings of Beale with that

of Lemay et al. and Devita et al. given the fact that Lemay et al. teaches away from the use of anti-HIV drugs and anti-cortisol drugs.

It is respectfully submitted that the present application is now in condition for allowance and such action is earnestly requested.

Respectfully submitted,

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